DCA22/GCA22 — RELATIONAL DATABASE MANAGEMENT SYSTEM

Time : Three hours   Maximum : 75 marks

SECTION A — (10 × 2 = 20 marks)

Answer ALL questions.

1.   What is meant by tuple?

2.   Who is database administrator?

3.   Write down the syntax for UNION operator.

4.   What is meant by Relational Dependency?

5.   State the importance of Foreign key?

6.   Write down the syntax for inserting rows in a table in SQL.

7.   Define a Cursor. What are its types?

8.   Give any two examples for PL/SQL built in functions.

9.   Compare SQL and NoSQL.

10.   What are the advantages of MongoDB?

SECTION B — (5 × 5 = 25 marks)

Answer ALL questions.

11. (a)   Discuss the components of DBMS.

Or

(b)   Write short notes on Hierarchical model.

12. (a)   Expound traditional operators in Relational Algebra.

Or

(b)   Give a brief note on Third normal form.

13. (a)   Illustrate the importance of NOTNULL and CHECK constraints in SQL.

Or

(b)   Expound additional database objects in SQL.

14. (a)   Discuss PL/SQL subprograms.

Or

(b)   Write a note on PL/SQL essential features.

15. (a)   What are the advantages of NoSQL?

Or

(b)   Comment on Transactional application in NoSQL.

SECTION C — (3 × 10 = 30 marks)

Answer any THREE questions.

16. Describe the three level architecture with a neat diagram.

17. Explain the concept of Relational database design.

18. Expound Sub queries in SQL with examples.

19. Explain the PL/SQL built in functions.

20. Compare Web scale application with Computation application in NoSQL.